

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
NON-PROVISIONAL PATENT APPLICATION

Title: Base Sign With Integral Signage And Method For Its Fabrication

Inventor: Larry G. Ingraham  
1703 N. Union Street  
Fostoria, Ohio 44830

Assignee: Roppe Corp.  
1602 N. Union Street  
Fostoria, Ohio 44830-1158

CROSS-REFERENCES TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No. 60/210,650, filed on June 9, 2001, entitled BASEBOARD WITH INTEGRAL SIGN AND METHOD FOR ITS FABRICATION.

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BACKGROUND OF THE INVENTION

Field of the Invention

This invention concerns, in a preferred embodiment,  
10 safety signs used in the interior of buildings.

Prior Art

The need for safety signs and their use inside of buildings is well recognized and well known. Signs: painted on walls; mounted above exits, with or without

5        flashing/continuous lighting; pointing to exits, fire escapes, etc.; held by screwed-on frames; adhesive backed; luminescent; are in common use and often are mandated by building codes. For the most part, such signs are attachments to existing walls, doors and stairways and are

10      not provided and mounted until the building has been finished, or nearly so. Also, such signs are not "convenient" with respect to cleaning and repainting of the walls, doors, etc., to which these signs are mounted. Some of the prior art safety signs are difficult to read when

15      certain unsafe conditions are present, such as smoke.

SUMMARY OF THE INVENTION

The present invention overcomes many of the problems of

20      prior art signs, signage and especially safety signs used on the interior of buildings. This invention's unique sign is formed in a conventional base or carpet cove i.e. "base"; and thus is of rugged and easily cleanable material, such as

rubber and vinyl plastic. This sign can be installed while the adjacent parts of the building are being finished; i.e., at the same time that regular bases/carpet coving is being installed and in the same manner of installation; hence, no  
5 special installation equipment nor specially trained labor is required. Sign symbols and words i.e. signage (indicia) are of the same material as the base, but of a different color and/or texture and/or appearance. This is accomplished by forming the signage/indicia information from  
10 a donor piece of the base material and inserting it permanently into corresponding indicia cutouts in a recipient base, having a difference of at least one of color, texture, appearance than the donor piece. The cutting of the signage information can be by various means,  
15 including water jet cutting and die cut. By placing the safety sign just above floor level, it is best seen by people crawling along in smoky hallways, etc.

BRIEF DESCRIPTION OF THE FIGURES

20 Fig. 1 is a perspective view of a first piece of conventional base of the cove type, the recipient base element;

Fig. 2 is a front view of the base element of Fig. 1,  
having indicia cutouts, most of which having been removed;

5 Fig. 3 is a front view of a second piece of base  
material, the donor element, having a different color than  
the first, recipient base of Figs. 1 and 2;

Fig. 4 is a front view of Fig. 3, showing signage  
indicia cutouts, with most of the indicia removed;

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Fig. 5 is a front view of various indicia; and

15 Fig. 6 is a perspective view of the assembled safety  
sign of this invention, having the recipient base of Fig. 2  
and the signage indicia from the donor base of Fig. 4,  
mounted to the bottom of a wall.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The primary/preferred embodiment of this invention is a safety sign for the interior of a building. This safety sign comprises a recipient base, with the signage information/indicia being integrated within and surrounded by the recipient base; but the signage originates from a different piece of base material, the donor element. The finished sign product is shown in Fig. 6; and the different materials employed, along with the progressive method of fabrication, are shown in Figs. 1-5.

Fig. 1 shows in perspective a standard piece 2 of base. The term "base", as employed hereinafter, encompasses other similar items, such as: carpet coving, cove base, stair riser, carpet cove cap, wall base, cove wall base, etc., as are well known in the building, flooring and carpeting trades. As also well known, the base is to be secured to the bottom few inches of a wall and overlies a small edge portion of the flooring, so as to cover the gap between the wall and flooring and protect the bottom of the wall from being scuffed. The baseboard 2 also can be employed as a stair riser.

Baseboard often is delivered to the job site in selected lengths of two to eight feet, as well as in rolls of greater length. Typical materials for bases have been

rubber and plastic. ASTM Standard F-1861 identifies three acceptable materials, to meet safety requirements: Thermoset Vulcanized SBR Rubber (TS); Thermoplastic Rubber (TP); and Thermoplastic Vinyl (TV). The baseboard 2 in Fig. 1

5 preferably is of any one of the ASTM-accepted materials, such as extruded type TS and would have any one of many colors, such as tan 4, (a first color) that would be compatible with the decor of the wall/floor/stair area in which the sign is to be installed. The color 4 is shown by  
10 upward right shading of the same type in Figs. 1, 2 and 6.

A very good quality of base material for the recipient element 2 would be 1/8" (3.175 mm) thick, but could be thinner, such as .080" (2.03 mm). To enable the safety sign resulting from the base 2 with integral indicia signage to  
15 be able to wrap around posts, corners, etc., it should meet the flexibility of ASTM F-137. The base material also should meet fire codes as well as be easily washable. To be easy to install with standard adhesives and for long lasting adhesion, the backside of the base 2 can be ribbed, as is  
20 well known. Although the base in Fig. 1 is shown with a standard toe 5, it could be provided with other toes, or no toe. The running length of the finished safety sign could be any convenient length, or a little longer than the signage length, or some increment lengths such as two, four

or six feet. Likewise the height of the base 2 could be anything, but would be better to conform to industry standards, such as 2 $\frac{1}{2}$ " (63.5 mm), 4" (101.6 mm) and 6" (152.0 mm). The surface of the base element 2 suitably can  
5 be of a low-gloss satin finish, which would be easy to clean with soap and water as well as other typical industrial cleaners used inside buildings for flooring and baseboards.

With reference to Fig. 2, a front view of the base 2, take as an example that the safety sign finished product  
10 (shown only in Fig. 6) is to have the signage indicia "EXIT"  
6, with an arrowhead 8 pointing to the right. Accordingly, as first steps in the fabrication of the sign according to this invention, there would be: a selection of base 2 material, color 4 and content of signage indicia 6, 8.  
15 Then, a suitable length of recipient base 2 of tan color 4 is obtained. Next, as shown in Fig. 2, the indicia 6, 8 are to be cutout from the base 2, preferably by cutting completely through the thickness of the base as if making a stencil. The method and equipment for such cutting can be  
20 determined by the fabricator; however, die cut and water jet cutting are useful. For ease of viewing and understanding Fig. 2, and not part of the fabrication, assume that the base 2 is lying on a workbench having a top surface of color 10, such as white, in color contrast to the tan 4 of the

base. Also assume that the EXIT indicia 6 has been cut out and fully removed from the base. Thus, there remains the hollow shapes 12, stencil-like, of the letters of EXIT, surrounded by the tan colored 4 material of the donor base

5 2. Also assume that the arrowhead 8 has been cut, around the line 14, but not yet removed. Once the arrowhead 8 is removed, the recipient base 2 will be ready for final assembly into the safety sign product 16, shown in Fig. 6.

As will be understood, the recipient base 2 defines the

10 background, the support and the framework for the signage.

The next step of fabrication is to select one or more colors for the indicia of the sign 16. For simplicity, let us select dark green (slant to the upper left shadings in Figs. 3 and 6) for all of the indicia 6' and 8', the letters 15 of the word EXIT and the arrowhead, as they will appear in the sign 16. To obtain donor material for the dark green 18 (the second color) indicia 6', 8', a piece of base material 20 of dark green 18, as shown in Fig. 3, is chosen. The material 20 preferably would be the same thickness and 20 substance as the base 2, but does not have to be a piece of toed base; it can be flat, not coved, and narrower (less height) than the base 2. However, its height has to be at least that of the tallest portion of the indicia 6', 8', which in the present example is the letter E.

For the same reasons as discussed with respect to Fig. 2, assume that in Fig. 4: the dark green piece of material 20 is lying on the white top 10 of a workbench; the EXIT indicia 6' has been cut out and removed, leaving the white 5 top 10 visible below the hollow, stencil-like letter shapes 12'; and the arrowhead 8' has been cut around the line 14', but not yet removed. If the cutting process, which makes the cut line 14 and similar cut lines around the EXIT indicia 6, removed essentially none of the recipient base 2, 10 then the indicia 6' and 8' cut from the donor material 20 could be the same size as the indicia 6 and 8; however, that is not to be expected for most cutting processes. Hence, the indicia 6', 8' from the donor material 20 will have to be slightly larger than the indicia 6, 8 removed from the 15 base 2, so as to fit snugly into the hollow shapes 12 of the indicia in the recipient base 2. Such a snug fit also can be termed a snap-in fit, but need not be so tight as a force fit, requiring machine pressure insertion. In Figs. 2, 4-6, the size differences between the indicia 6 and 6', and 8 and 20 8' and the hollow shapes 12 and 12' are not easily seen, because of the scale of these Figs.

Fig. 5 shows the green colored indicia 6', 8' lying on the workbench top 10, after cutout and removal from the donor material 20. Although the indicia 6', 8' now are

ready to be inserted, for example manually, into the base 2 and, in the present example will be seen as dark green 18 on a tan 4 background, it could be advantageous to increase their visual recognition in the event of hazy/smoky  
5 conditions or dim lighting. The indicia surfaces could be coated/impregnated, either before or after being cut out, with phosphorescent substance (escape routing photo-luminescent, per D.I.N. 67510), glitter particles, etc., as symbolized by the references 22, 24 in Fig. 5. The entire  
10 surface of the donor material 20 could thus be enhanced.  
Another recognition enhancement would be tactile by providing the surface of the indicia 6', 8' with a texture significantly different from the texture of the surrounding surface of the recipient base 2. For example, a rough  
15 surface 26, also shown in Fig. 5.

Once the signage indicia 6', 8' are ready, as in Fig. 5, they are inserted snugly into their respective, recipient cutout shapes 12 in the base 2; and the resulting product 16 can be packed and shipped for use in a building site, to be  
20 installed as shown in Fig. 6, against the bottom of a wall 28 and over the top edge of flooring 30. The installing would be the same as for standard base, for example mastic troweled onto the wall 28 behind the position of the safety sign 16, which then is placed into firm surface contact with

the wall. Such mastic or other installing means also would secure the indicia 6', 8' in their positions. Not shown in Fig. 6 are pieces of baseboards which normally would be positioned to the left and right of the sign 16, in the 5 typical installation of the baseboard.

Since the steps of packing, shipping, unpacking and handling the sign product 16 might dislodge the indicia 6', 8' from their positions in the base 2, the backside of the base 2 could be provided with a peel off, sticky backing 32 10 (shown with a phantom reference line in Fig. 2) after the indicia 6, 8 are removed. Thereupon, when the indicia 6', 8' are inserted into the base 2, they will adhere to the sticky side of the backing 32 until it is removed, just prior to mounting the entire sign product 16 against the 15 wall 28.

Although it is believed preferable for the front surfaces of the base 2 and the indicia 6', 8' to lie in a common plane, for ease of periodic cleaning the sign product 16 subsequent to its installation, and that is why the base 20 2 and the second piece of base material 20 would be of the same thickness; there could be circumstances, for example tactile recognition, where it was desired for the indicia 6', 8' to be inset (thinner than) or projecting forward from (thicker than) the front surface of the base stencil,

support 2, which would require that the donor base material 20 also be respectively thinner or thicker than the base 2.

Although the preferred example shown in Figs. 1-6 employs only two pieces of base material 2 and 20 to attain 5 a background color (tan 4) of the recipient (first) base element and an indicia color (green 18), from the second base element, the donor, more pieces of donor base can be employed to achieve more than one color of signage. Also, each component of the signage, the individual letters and 10 the arrow of Figs. 4-6, for example, need not be cut out to be separate from each other. Some or all donor portions can be linked to each other, as in a script font. Likewise then, the stencil-like cutting out and removal from the first base member 2, the recipient, of the indicia need not be one 15 component separate from the next.

The sign of this invention and the method of its fabrication will be understood to be advantageous over signs made of a similar base or baseboard material upon which the signage merely is inked or painted upon, or a signage sheet 20 is glued on top of, or the signage is laminated upon.

The term "safety sign" has been used hereinabove to emphasize the preferred content of the signage. However, the word "safety" could be replaced by the word "information" or be omitted. Likewise, the preferred --just

above the floor level-- location of this sign of this invention should not be its only place of use. As mentioned hereinabove, the sign could be positioned on a stair riser. Indeed, other placements of the unique sign of this invention are well within the skill of the building and interior finishing trades, to accomplish signage needs.

That which is considered within the ambit of my invention is set forth in the next following claims